

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2017 Levee Inspection Results

Reclamation District No. 2091 Chase

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Reclamation District No. 2091 Chase

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	7.46
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/12/2017 - 4/12/2017			
DWR Inspector	Richard Willoughby			
Accompanied By	Mike Alves RD 2091			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	2
LM End	0.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD2091_01_s_2013_2				
Comment Code					
Inspector Comment					
The LMA has copy of O & M manual on file at district office.					

No Photos

LM Start	0.00	Rating **	A	Issue No.	4
LM End	0.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_RD2091_01_s_2013_4				
Comment Code					
Inspector Comment					
The LMA maintains adequate flood fight supplies and equipment.					

No Photos

LM Start	0.00	Rating **	A	Issue No.	5
LM End	0.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_RD2091_01_s_2013_5				
Comment Code					
Inspector Comment					
The LMA maintains a good working knowledge of flood response activities. And been involved in flood fight training within the last two years.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.01	Rating **	M	Issue No.	18
LM End	7.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.541547 °	37.478825 °
				-121.092943 °	-121.044655 °
DWR ID	DWR_RD2091_01_s_2017_18				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.01	Rating **	M	Issue No.	19
LM End	7.46	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.541547 °	37.478825 °
				-121.092943 °	-121.044655 °
DWR ID	DWR_RD2091_01_s_2017_19				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.08	Rating **	M	Issue No.	23
LM End	0.08	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.541970 °	37.541970 °
				-121.093980 °	-121.093980 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:43207 DS_ID:23155 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal pipe through levee 7.2 feet below crown. Slide gate in 36-inch corrugated metal pipe riser on the waterward slope. Originally included in the 1961 O&M manual. As built drawings available, Drawing # 07-04-1555: 1555/17 & 1555/55, 906+85. FS Date: 1/29/2015 2:26:31 PM					

Photo 1 of 3 : UCIP_SP_2017_43207_38148.jpg



Slide gate in 36-inch CMP riser on WS toe.

LM Start	0.08	Rating **	M	Issue No.	23 (cont)
LM End	0.08	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP_SP_2017_43207_38147.jpg



Slide gate in 36-inch CMP riser on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.08	Rating **	M	Issue No.	23 (cont)	
LM End	0.08	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.541970 °		37.541970 °
				-121.093980 °		-121.093980 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:43207						
DS_ID:23155						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and if so should be done so properly.						
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal pipe through levee 7.2 feet below crown. Slide gate in 36-inch corrugated metal pipe riser on the waterward slope. Originally included in the 1961 O&M manual. As built drawings available, Drawing # 07-04-1555: 1555/17 & 1555/55, 906+85.						
FS Date: 1/29/2015 2:26:31 PM						

Photo 3 of 3 : UCIP_SP_2017_43207_38146.jpg



CMP stormdrain at outlet off WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.10	Rating **	U	Issue No.	24
LM End	0.10	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.542030 °	37.542030 °
				-121.094370 °	-121.094370 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51387 DS_ID:23156 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as last inspection this is a non-functional crossing with no visible inlet on LS or outlet on WS. The only appurtenance found at this location is a CMP riser with a missing cover located on the WS. This crossing remains Urgent since the pipe on the WS may still be opened. According to Mike Alves, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Pipe open on WS and slide gate has been removed. Appears abandoned and should be done so properly. (M. Alves - City of Modesto) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 9 feet below crown. Slide gate in corrugated metal pipe (CMP) riser located on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.07), Drawing No. 07-04-1555, sheet(s) 1555/17 and 1555/55, reference station 907+55]. FS Date: 11/18/2016					

LM Start	0.10	Rating **	U	Issue No.	24 (cont)
LM End	0.10	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP_SP_2017_51387_38150.jpg



36-inch CMP riser on WS slope.

Photo 2 of 3 : UCIP_SP_2017_51387_38149.jpg



Slide gate missing from open end of pipe at WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.10	Rating **	U	Issue No.	24 (cont)	
LM End	0.10	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.542030 °	37.542030 °	
				-121.094370 °	-121.094370 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51387 DS_ID:23156 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as last inspection this is a non-functional crossing with no visible inlet on LS or outlet on WS. The only appurtenance found at this location is a CMP riser with a missing cover located on the WS. This crossing remains Urgent since the pipe on the WS may still be opened. According to Mike Alves, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Pipe open on WS and slide gate has been removed. Appears abandoned and should be done so properly. (M. Alves - City of Modesto) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 9 feet below crown. Slide gate in corrugated metal pipe (CMP) riser located on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.07), Drawing No. 07-04-1555, sheet(s) 1555/17 and 1555/55, reference station 907+55]. FS Date: 11/18/2016						

Photo 3 of 3 : UCIP_SP_2017_51387_76669.jpg



Overview of levee crown at pipe crossing.

LM Start	0.23	Rating **	U	Issue No.	15
LM End	0.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.541550 °	37.541550 °
				-121.096742 °	-121.096742 °
DWR ID	DWR_RD2091_01_s_2016_15				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Caving on landward shoulder possible collapsed pipe. Caving is 34 feet long over one inch depth.					

Photo 1 of 4 : SP_2017_RD2091_318_15_20170412_00008.jpg



Looking west at dip on landward levee shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.23	Rating **	U	Issue No.	15 (cont)	
LM End	0.23	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.541550 °		37.541550 °
				-121.096742 °		-121.096742 °
DWR ID	DWR_RD2091_01_s_2016_15					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Caving on landward shoulder possible collapsed pipe. Caving is 34 feet long over one inch depth.						

Photo 2 of 4 : SP_2017_RD2091_318_15_20170412_00009.jpg



Looking southeast at depression along landward shoulder.

LM Start	0.23	Rating **	U	Issue No.	15 (cont)
LM End	0.23	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : SP_2017_RD2091_318_15_20170412_00010.jpg



Looking south at depression along landward shoulder.

LM Start	0.23	Rating **	U	Issue No.	15 (cont)
LM End	0.23	Issue Type +	Ma	Location *	LS

Photo 4 of 4 : SP_2017_RD2091_318_15_20170412_00011.jpg



Looking northwest at depression along landward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.24	Rating **	U	Issue No.	25
LM End	0.24	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.541564 °	37.541564 °
				-121.096792 °	-121.096792 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51388 DS_ID:23158 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as last inspection. This crossing remains Urgent due to the flap gate still missing from the WS toe. According to Mike A. this crossing is an abandoned line and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Flap gate has fallen off at WS toe. Appears abandoned and if so should be done so properly. (M. Alves - City of Modesto) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 10 feet below crown. Flap gate located on the waterside (WS) end. Drain opening is located approximately 15 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.23), Drawing No. 07-04-1555, sheet(s) 1555/17 and 1555/55, reference station 915+00]. FS Date: 11/18/2016					

LM Start	0.24	Rating **	U	Issue No.	25 (cont)
LM End	0.24	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_51388_38156.jpg



Pipe visible in canal on WS toe.

Photo 2 of 3 : UCIP_SP_2017_51388_38155.jpg



Flapgate has fallen off at WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.24	Rating **	U	Issue No.	25 (cont)
LM End	0.24	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.541564 °	37.541564 °
				-121.096792 °	-121.096792 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51388 DS_ID:23158 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as last inspection. This crossing remains Urgent due to the flap gate still missing from the WS toe. According to Mike A. this crossing is an abandoned line and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Flap gate has fallen off at WS toe. Appears abandoned and if so should be done so properly. (M. Alves - City of Modesto) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 10 feet below crown. Flap gate located on the waterside (WS) end. Drain opening is located approximately 15 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.23), Drawing No. 07-04-1555, sheet(s) 1555/17 and 1555/55, reference station 915+00]. FS Date: 11/18/2016					

Photo 3 of 3 : UCIP_SP_2017_51388_38154.jpg



Concrete headwall under pipe at WS toe.

LM Start	0.25	Rating **	M	Issue No.	16
LM End	0.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.541492 °	37.541408 °
				-121.097052 °	-121.097453 °
DWR ID	DWR_RD2091_01_s_2016_16				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Several sites of rill erosion and possible rodent holes along landward shoulder and slope.					

Photo 1 of 3 : SP_2017_RD2091_318_16_20170412_00044.jpg



Looking east at rill erosion above rodent hole on landward slope. (Spring 2017)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.25	Rating **	M	Issue No.	16 (cont)	
LM End	0.28	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.541492 °		37.541408 °
				-121.097052 °		-121.097453 °
DWR ID	DWR_RD2091_01_s_2016_16					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Several sites of rill erosion and possible rodent holes along landward shoulder and slope.						

Photo 2 of 3 : SP_2017_RD2091_318_16_20170412_00012.jpg



Looking east at rill erosion on landward slope.

LM Start	0.25	Rating **	M	Issue No.	16 (cont)
LM End	0.28	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : SP_2017_RD2091_318_16_20170412_00013.jpg



Looking east at rill erosion and possible rodent hole on landward slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.63	Rating **	M	Issue No.	26
LM End	0.63	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.541220 °	37.541220 °
				-121.103880 °	-121.103880 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51639
DS_ID:23161
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent since the flap gate appears to fully close. According to Mike Alvez, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Appears abandoned and if so should be done so properly. (M. Alvez - City of Modesto)
FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 12 feet below crown. Flap gate and concrete headwall are located on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.64)].
FS Date: 11/18/2016

LM Start	0.63	Rating **	M	Issue No.	26 (cont)
LM End	0.63	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_51639_38158.jpg



24-inch CMP on concrete headwall with flapgate on WS toe.

Photo 2 of 3 : UCIP_SP_2017_51639_38157.jpg



24-inch CMP on concrete headwall with flapgate on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.63	Rating **	M	Issue No.	26 (cont)
LM End	0.63	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.541220 °	37.541220 °
				-121.103880 °	-121.103880 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51639 DS_ID:23161 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent since the flap gate appears to fully close. According to Mike Alvez, this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Appears abandoned and if so should be done so properly. (M. Alvez - City of Modesto) FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through levee, 12 feet below crown. Flap gate and concrete headwall are located on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 6, September 1961, (HLM 0.64)]. FS Date: 11/18/2016					

Photo 3 of 3 : UCIP_SP_2017_51639_76677.jpg



View of LS.

LM Start	2.61	Rating **	M	Issue No.	20
LM End	2.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.520108 °	37.520027 °
				-121.093147 °	-121.092767 °
DWR ID	DWR_RD2091_01_s_2017_20				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	3.91	Rating **	M	Issue No.	21
LM End	3.91	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.506815 °	37.506815 °
				-121.082780 °	-121.082780 °
DWR ID	DWR_RD2091_01_s_2017_21				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Sinkhole at landward side toe					

Photo 1 of 1 : SP_2017_RD2091_318_21_20170412_00045.jpg



Looking south at possible sinkhole on landward toe.

LM Start	4.25	Rating **	M	Issue No.	22
LM End	4.25	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.501907 °	37.501907 °
				-121.082123 °	-121.082123 °
DWR ID	DWR_RD2091_01_s_2017_22				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP_2017_RD2091_318_22_20170412_00046.jpg



Looking south at rodent activity on landward shoulder and slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	4.59	Rating **	M	Issue No.	27
LM End	4.59	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.497390 °	37.497390 °
				-121.080370 °	-121.080370 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:43209 DS_ID:23165 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through levee 15.0 feet below crown. Abandoned concrete inlet box on the waterward slope of levee. 6'X5' Concrete distribution box at the landward toe. Originally included in the 1961 O&M manual. FS Date: 1/29/2015 2:27:42 PM					

LM Start	4.59	Rating **	M	Issue No.	27 (cont)
LM End	4.59	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_43209_38211.jpg



Distribution box on LS toe.

Photo 2 of 3 : UCIP_SP_2017_43209_38210.jpg



Open CMP pipe through levee at distribution box on LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	4.59	Rating **	M	Issue No.	27 (cont)	
LM End	4.59	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.497390 °	37.497390 °	
				-121.080370 °	-121.080370 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:43209						
DS_ID:23165						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and if so should be done so properly.						
FIELD_STRUCT_DESC: 36-inch corrugated metal pipe through levee 15.0 feet below crown. Abandoned concrete inlet box on the waterward slope of levee. 6'X5' Concrete distribution box at the landward toe.						
Originally included in the 1961 O&M manual.						
FS Date: 1/29/2015 2:27:42 PM						

Photo 3 of 3 : UCIP_SP_2017_43209_38209.jpg



Abandoned concrete box on WS slope.

LM Start	4.85	Rating **	U	Issue No.	10
LM End	4.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.494115 °	37.494115 °
				-121.078100 °	-121.078100 °
DWR ID	DWR_RD2091_01_f_2016_10				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Several large rodent holes on landward slope.					

Photo 1 of 3 : SP_2017_RD2091_318_10_20170412_00001.jpg



Looking south at several rodent holes on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	4.85	Rating **	U	Issue No.	10 (cont)	
LM End	4.85	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.494115 °		37.494115 °
				-121.078100 °		-121.078100 °
DWR ID	DWR_RD2091_01_f_2016_10					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Several large rodent holes on landward slope.						

Photo 2 of 3 : SP_2017_RD2091_318_10_20170412_00002.jpg



Looking south at close-up view of rodent holes on landward slope.

LM Start	4.85	Rating **	U	Issue No.	10 (cont)
LM End	4.85	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : SP_2017_RD2091_318_10_20170412_00003.jpg



Looking west at close-up view of rodent holes on landward slope.

LM Start	5.20	Rating **	M	Issue No.	13
LM End	5.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.490756 °	37.490756 °
				-121.073410 °	-121.073410 °
DWR ID	DWR_RD2091_01_f_2016_13				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Vehicle traffic damaging slope on waterward and landward slope.					

Photo 1 of 2 : SP_2017_RD2091_318_13_20170412_00006.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	5.20	Rating **	M	Issue No.	13 (cont)	
LM End	5.20	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.490756 °		37.490756 °
				-121.073410 °		-121.073410 °
DWR ID	DWR_RD2091_01_f_2016_13					
Comment Code						
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comment						
Vehicle traffic damaging slope on waterward and landward slope.						

Photo 2 of 2 : SP_2017_RD2091_318_13_20170412_00007.jpg



Looking at damage on waterward slope.

LM Start	5.92	Rating **	M	Issue No.	12
LM End	5.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.485998 °	37.485998 °
				-121.063323 °	-121.063323 °
DWR ID	DWR_RD2091_01_f_2015_12				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 2 : SP_2017_RD2091_318_12_20170412_00004.jpg



Looking north at untrimmed tree at landward toe.

LM Start	5.92	Rating **	M	Issue No.	12 (cont)
LM End	5.92	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP_2017_RD2091_318_12_20170412_00005.jpg



Look southeast at untrimmed tree at landward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.46	04/12/2017 04/12/2017	Richard Willoughby

LM Start	7.42	Rating **	U	Issue No.	8
LM End	7.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.479308 °	37.478998 °
				-121.044708 °	-121.044660 °
DWR ID	DWR_RD2091_01_s_2017_8				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repaired area with concrete containing rebar. Need to remove rebar.					

LM Start	7.42	Rating **	U	Issue No.	8 (cont)
LM End	7.45	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : SP_2017_RD2091_318_8_20170412_00047.jpg



Looking east at concrete rubble with rebar at landward toe next to canal.

Photo 2 of 2 : SP_2017_RD2091_318_8_20170412_00048.jpg



Looking northeast at concrete rubble with rebar at landward toe next to canal.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Reclamation District No. 2091 Chase

Waterway			Bank	Unit Miles
Unit No. 02 San Joaquin River				0.05
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/12/2017 - 4/12/2017			
DWR Inspector	Richard Willoughby			
Accompanied By	Dave Torres DWR			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Reclamation District No. 2091 Chase

Looking east at typical view of landward slope.

Looking west at typical view of waterward slope.

Page 1 of 3

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.05	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.02	Rating **	M	Issue No.	4
LM End	0.02	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.482450 °	37.482450 °
				-121.051220 °	-121.051220 °
DWR ID					

Comment Code

Inspector Comment

FS_ID:51390
DS_ID:23175
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 11/18/2016 Same as last inspection. This is a non-functional crossing with flap gate in the closed position. This crossing has been downgraded from Urgent to Non-Urgent -- no integrity issues were observed on the levee crown or slopes. According to Mike A. this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015
Flap gate rusted in-place and does not function. In closed position. (M. Alves - City of Modesto)
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through levee, 16.4 feet below the crown. Flap gate is located on the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 1992].
FS Date: 11/18/2016

LM Start	0.02	Rating **	M	Issue No.	4 (cont)
LM End	0.02	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP_SP_2017_51390_38216.jpg



24-inch CMP with flapgate visible on WS toe.

Photo 2 of 3 : UCIP_SP_2017_51390_76689.jpg



Overview photo of levee crown at crossing.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2091 Chase

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.05	04/12/2017 04/12/2017	Richard Willoughby

LM Start	0.02	Rating **	M	Issue No.	4 (cont)	
LM End	0.02	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.482450 °	37.482450 °	
				-121.051220 °	-121.051220 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51390 DS_ID:23175 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Same as last inspection. This is a non-functional crossing with flap gate in the closed position. This crossing has been downgraded from Urgent to Non-Urgent -- no integrity issues were observed on the levee crown or slopes. According to Mike A. this crossing is abandoned and the City of Modesto is working with CVFPB to authorize proper abandonment/removal. The City is working at finding funds to pay for proper abandonment/removal of all the drainage structures through this levee. (O. Magana - DWR UCIP)01/29/2015 Flap gate rusted in-place and does not function. In closed position. (M. Alves - City of Modesto) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through levee, 16.4 feet below the crown. Flap gate is located on the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 1992]. FS Date: 11/18/2016						

Photo 3 of 3 : UCIP_SP_2017_51390_76686.jpg



Overview of levee crown at crossing and at a distance there is a shooting range.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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